REMARKS

This application has been reviewed in light of the Office Action mailed on April 22, 2004. Claims 1-9 are pending in the application with Claim 1 being in independent form. By the present Amendment, Claim 1 has been amended. No new matter or issues are believed to be introduced by the amendments.

About the Invention

The present invention relates generally to apparatuses and methods for generating and coding for transmission of an animated graphic image. The invention allows animated graphics to be defined in a highly compressed way. Every operation, such as an object to be drawn or moved is represented by a command word followed by a variable length of data.

Instead of using a conventional method of displaying a sequence of bitmaps, a vector graphics format is defined which describes images in terms of their structural components. However, the present invention is not incompatible with the use of bitmaps and may incorporate them as another structural component. Once defined from structural components, shapes can be stored in memory, placed on a screen, grouped together, copied resized and moved to produce a graphical animation. In addition, the described vector graphics format minimizes the processing requirements on the target platform, thus making it particularly suitable for hand-held devices. For example, a single shape definition command and two shape write commands replaces six object commands that were previously necessary to draw the two shapes.

(1) In the Office Action, Claims 1-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,058,397 issued to Barrus et al. ("Barrus") in view of U.S. Patent No. 4,805,017 issued to Kaneko et al ("Kaneko"). Applicant traverses for the reasons set forth below.

With respect to independent claim 1, the Examiner alleges that Barrus teaches at Col. 7, lines 31-51, a method for generating and coding for transmission of an animated graphic image comprising the steps of:

> *composing a first frame of the image from a plurality of component objects from a predetermined set of object types, the composition including scaling and location of each object within a fixed coordinate set image field.*

The Examiner further alleges that Barrus teaches at Col. 7, lines 52-55:

> *coding the first frame as an ordered rendering list of the component objects.*

It is respectfully submitted that Barrus does not teach the aforementioned steps as alleged in the instant Office Action. In particular, Barrus does not teach, (a) a predetermined set of object types and (b) scaling.

It is instructive to first briefly review Barrus which teaches advantages associated with dividing up a virtual reality scene into two or more "locales" where locale "A" includes a cup 302, a saucer 304 and a table 300 and locale "B" includes saucer 306. By

dividing up the virtual reality scene into locales, the entire file does not have to be downloaded, instead, ever decreasing file sizes can be downloaded and worked on.

It is respectfully submitted that Barrus does not teach or disclose the underlined, namely, *composing a first frame of the image from a plurality of component objects from a predetermined set of object types*, as recited in Claim 1.

The specification defines what is meant by a "component object" and "a predetermined set of object types". In the specification, a number of examples are used in which component object images are derived from drawing objects, such as points, text and polygons. One such component object image 10 is shown in Fig. 1, constructed from a total of ten objects 11-20 (i.e., lines, points, various geometric shapes). The drawing objects (e.g., points, text, polygons) constitute the predetermined set of object types.

In sharp contrast, Barrus merely discloses a virtual reality scene comprised of various objects (e.g., cups, saucers, tables) for illustrating that certain of the objects are located in one locale while certain other objects are contained in other locales. In this manner, if an object requires manipulation, only the locale in which that particular object resides will need to be down loaded. The objects of Barrus do not constitute component objects derived from a predetermined set of object types. As such, there is no teaching or suggestion of *composing a first frame of the image from a plurality of component objects from a predetermined set of object types*, as recited in Claim 1. Barrus is silent in this regard. It is submitted that there is no teaching of how the objects of Barrus are derived because the objects are only used as an aid in describing the concept of downloading only a portion of a virtual reality scene.

It is further submiited that Barrus does not teach scaling, as recited in Claim 1. Scaling is germaine to the present invention because the invention is applicable for display on a number of portable devices having different display resolutions. Because the display resolution of a targeted display is not necessarily known when an image is being drawn, in one embodiment, an operator could specify in a header to a message containing a component object image, the intended display resolution and arrange for the terminal to scale the data accordingly. By contrast, Barrus is silent with respect to scaling.

In the Office Action, the Examiner asserts that Kaneko remedies a deficiency in Barrus. Specifically, the Examiner asserts that Kaneko teaches *sequentially coding each subsequent frame (n) as a number of data words representing the difference between that frame (n) and the previous frame (n-1).* The Examiner asserts that differential coding is well known in the art.

Independent Claim 1 has been amended herein to better define Applicant's invention and to patentably distinguish Applicant's invention over Barrus and Kaneko, alone and in combination. Claim 1 now recites limitations and/or features which are not disclosed or suggested by the cited references.

> *sequentially coding each subsequent frame (n) as a number of animation command words representing respective animation transforms between the frame (n) and a previous frame (n-1).*

It is respectfully submitted that at least the limitations and/or features of Claim 1 which are underlined above are not disclosed or suggested by Kaneko.

Accordingly, applicant respectfully request withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claim 1 and allowance thereof is respectfully requested.

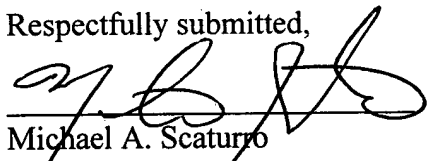
Claims 2-9 depend from independent Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 2-9 are believed to be allowable over Barrus and Kaneko, alone and in combination.

Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claims 2-9 is respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-9 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Dicron Halajian, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-333-9607

Respectfully submitted,



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